MAXWELL JONES

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EDUCATION

Bachelor of Science, Artificial Intelligence and Math

2019-Present

Carnegie Mellon University '23, Pittsburgh, PA

- **GPA: 4.0**
- Fundamentals of Programming and Computer Science, Principles of Imperative Computation
- Calculus I, II, Linear Algebra, Physics I, II
- (15-151) Intro to Discrete Math TA, Great Theoretical Ideas in Computer Science Tutor

High School Graduate

2015-2019

Thomas Jefferson High School for Science and Technology, Alexandria, VA

GPA: ~3.6

Multivariable Calculus, Complex Analysis, Differential Equations

STRENGTHS AND PROJECTS

Coding

- Python, Java, C, SQL, Julia, Javascript, HTML, Sklearn, Keras, NumPy
- Proficient with neural networks, random forests, pathfinding algorithms (Dijkstra, A*), Traveling Salesmen Problem, Game AIs (heuristic, negamax, alpha-beta pruning)

Projects

- Helped create WalkSafe, a program that outputted Safe and Efficient walking paths given a start and end point at night in dangerous areas, using a maps API, A*, and crime data at TartanHacks 2019
- Competed in an online AI housing competition, implementing **random forests** through Sklearn.
- Coded an algorithm that played a game of Othello against a human using a heuristic and negamax/alpha beta pruning for finding new moves.
- Used Python to make a **two-layer neural network** with six hidden nodes without the use of libraries. I used this network to test my understanding of neural networks.
- Created a program to calculate plus/minus for basketball lineups, given when players came in and out of games and when teams scored (implemented for my varsity high school basketball team).

LEADERSHIP AND EXPERIENCE

College

- Treasurer for SPIRIT, CMU's Black Student Orginization
- Origami Club Executive Board Member
- Club Basketball
- CMU SCS Social Media Ambassador
- Member of Kappa Sigma Fraternity

Fiat Chrysler Automobiles Internship

Summer 2020

- Worked with the data science team to optimize the HR Absenteeism prediction model
- Used idea behind Meta Analysis to add cross referenced variables across plants to model

Origami

- Wrote a column on young origamists in *The Paper*, a national origami magazine.
- Created an origami website for young origamists to share work.
- Taught origami in multiple countries across three continents.

Personal Computer Science and AI Tutor

Group Java tutor for high school/middle schoolers and one on one AI/Python Tutor.